

How to install, configure and use CAST Highlight's extension for **Atlassian BitBucket**

What is CAST Highlight

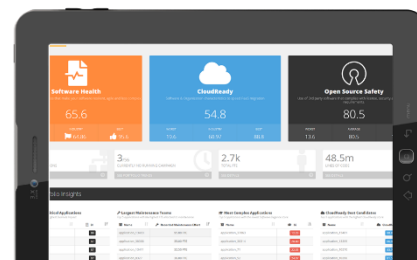
CAST Highlight is the SaaS Software Intelligence platform to monitor software health, cloud readiness, open source safety of your Application Portfolio with code-level analytics. Highlight supports a wide variety of technologies, including Java, COBOL, SAP/Abap, .Net, Python, PHP, PL/SQL, Objective-C & more.

Highlight uses predictive patterns analysis built over time by scanning thousands of applications and billions of lines of code. By looking at the frequency of issues and potential impacts found into source code, managers can review how the factory is operating without drowning in detail.

In Highlight, software health of a project is monitored and tracked through four main indicators that consolidate hundreds of code patterns:

- **Software Health:** indicates programming best practices that make software bullet-proof, more robust and secure. This index is derived through technology-specific code analysis that searches for the presence of code patterns that may comprise the reliability of the software at short term.
[Click here for more information](#)
- **Cloud Readiness:** In Highlight, cloud readiness of an application is measured by the CloudReady index. This indicator assesses the software & organization characteristics that can slow or speed a PaaS migration.
[Click here for more information](#)
- **Open Source Safety:** Open Source Safety indicates the use of 3rd-party components that comply with security, license and age requirements. This index from 0 (low safety) to 100 (high safety) is an average of the three main scores for measuring Open Source/Third-Party component risk: security, license, and obsolescence risks.
[Click here for more information](#)

More information: casthighlight.com

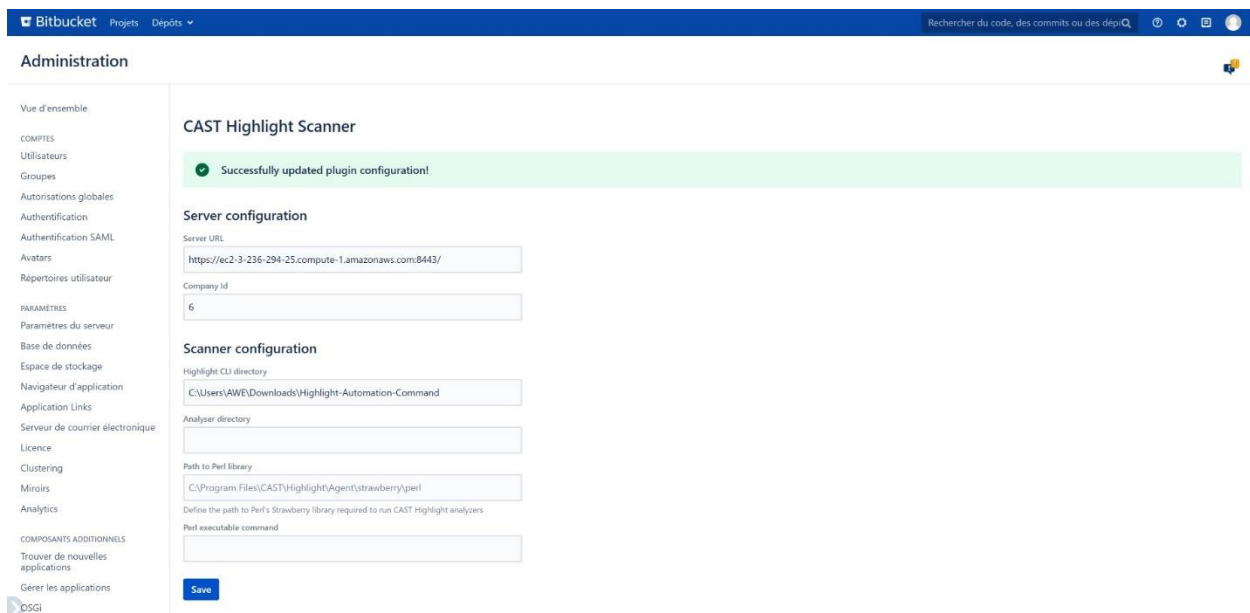


Prerequisites

The CAST Highlight Scanner is a plugin for Atlassian BitBucket that leverages our command line to automatically scan a source code repository and upload corresponding scan results to CAST Highlight's platform.

1. The CAST Highlight's [command line](#) must be accessible on Atlassian BitBucket server
2. The server should have Perl 5.28 installed (best is to install the Local Agent)
3. The server should have access to the internet (if you want to automatically upload results)

Server & Scanner configuration



The screenshot shows the BitBucket Administration interface for the CAST Highlight Scanner. A green notification banner at the top states "Successfully updated plugin configuration!". Below this, the configuration is divided into three sections:

- Server configuration:** Includes fields for "Server URL" (https://ec2-3-236-294-25.compute-1.amazonaws.com:8443/), "Company Id" (6), and "Highlight CLI directory" (C:\Users\AWEN\Downloads\Highlight-Automation-Command).
- Scanner configuration:** Includes fields for "Analyser directory" (empty), "Path to Perl library" (C:\Program Files\CAST\Highlight\Agent\strawberry\perl), and "Perl executable command" (empty).

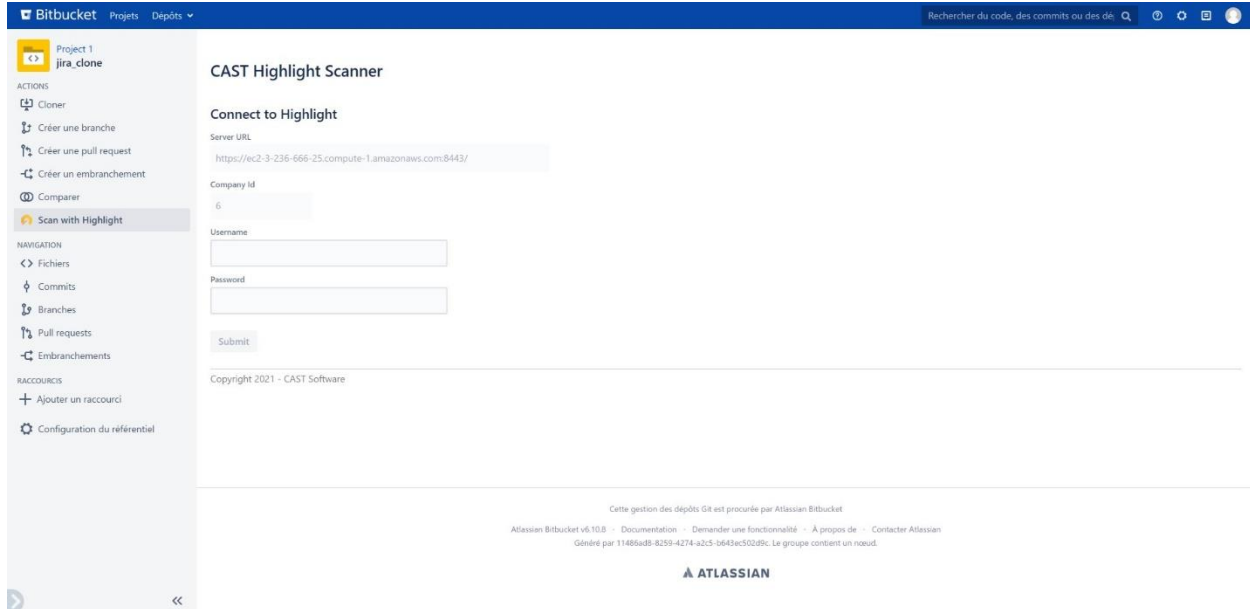
A "Save" button is located at the bottom of the configuration form.

This administration screen will allow you to specify the CAST Highlight server when scan results will be uploaded to, as well as where the command line and the Perl analyzers and binary are located on the BitBucket server:

- **Server URL:** the CAST Highlight server address (e.g. <https://rpa.casthighlight.com>)
- **Company Id:** this is your company identifier
- **Highlight CLI directory:** this is the folder where the command line (JRA) is located on your BitBucket server
- **Analyser directory:** this is the folder where the CAST Highlight Perl analyzers are located (in the command line package, they are in Highlight-Automation-Command\perl)

- **Path to Perl library:** this is the folder where Perl's binary files are located. Installing the Local Agent will automatically get Perl installed in this folder: C:\Program Files\CAST\HighlightAgent\strawberry\perl)

User Account Configuration

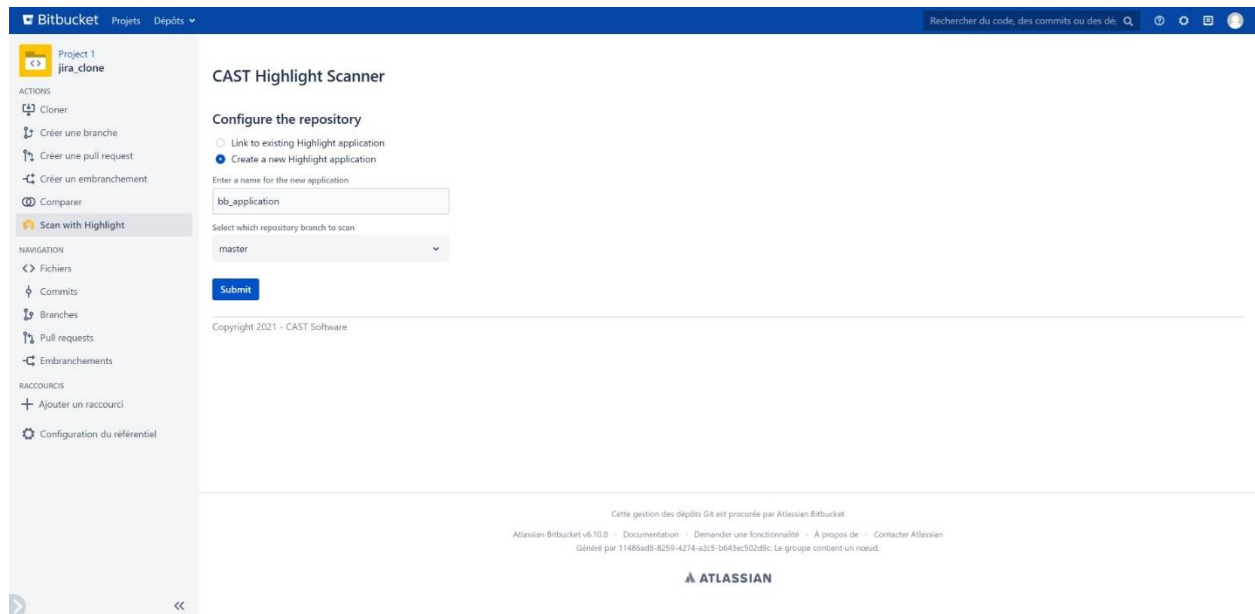


The screenshot shows the Bitbucket interface for configuring the CAST Highlight Scanner. The page title is "CAST Highlight Scanner". Under the heading "Connect to Highlight", there are four input fields: "Server URL" (pre-filled with "https://ec2-3-236-666-25.compute-1.amazonaws.com:8443/"), "Company Id" (pre-filled with "6"), "Username" (empty), and "Password" (empty). A "Submit" button is located below the password field. The footer of the page includes the Atlassian logo and copyright information: "Copyright 2021 - CAST Software".

The information on this screen is needed to authenticate to the Highlight server you specified (e.g. <https://rpa.casthighlight.com>):

- Username: this is the user login you previously activated
- Password: this is the password you defined for your user login

Repository Configuration

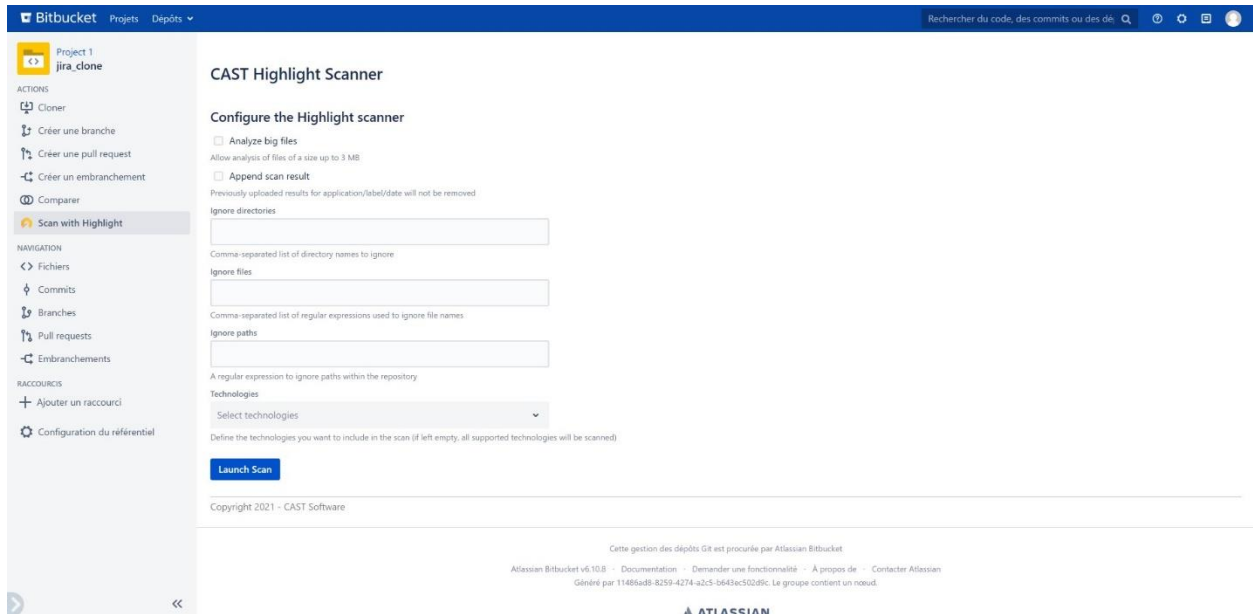


The screenshot shows the Bitbucket interface for configuring a repository for scanning. The page title is "CAST Highlight Scanner". Under the heading "Configure the repository", there are two radio button options: "Link to existing Highlight application" (unselected) and "Create a new Highlight application" (selected). Below these options, there is a text input field labeled "Enter a name for the new application" containing the text "bb_application". Underneath that is a dropdown menu labeled "Select which repository branches to scan" with "master" selected. A blue "Submit" button is located below the dropdown. The left sidebar shows the "Scan with Highlight" action selected. At the bottom of the page, there is a footer with the Atlassian logo and copyright information: "Copyright 2021 - CAST Software".

This allows you to select the BitBucket repository that will be scanned with CAST Highlight:

- If the repository has been previously scanned and uploaded to CAST Highlight, select “Link to existing Highlight application” and specify the corresponding applicationId
- If the repository has never been scanned, select “Create a new Highlight application” and enter the name of the repository/application as you want to see it in CAST Highlight dashboards
- Finally, select the branch of the repository you want to scan (e.g. master)

Repository Scan Configuration



The screenshot shows the Bitbucket interface for configuring the CAST Highlight Scanner. The main configuration area includes the following options:

- Analyze big files**: Allow analysis of files of a size up to 3 MB.
- Append scan result**: Previously uploaded results for application/label/date will not be removed.
- Ignore directories**: Comma-separated list of directory names to ignore.
- Ignore files**: Comma-separated list of regular expressions used to ignore file names.
- Ignore paths**: A regular expression to ignore paths within the repository.
- Technologies**: Select technologies to scan. Define the technologies you want to include in the scan (if left empty, all supported technologies will be scanned).

A **Launch Scan** button is located at the bottom of the configuration area.

This screen is meant to fine-tune the scan you are about to launch with additional options:

- **Analyze big files**: by default, CAST Highlight analyzers skip large files (over 3MB) to prevent performance issues. Check this box if you want to analyze them anyway
- **Append scan result**: this option is meant to upload scan results without submitting them for score aggregations. This option can be used when you want to consolidate multiple repositories into one application in CAST Highlight
- **Ignore directories**: directory names to ignore during the scan (e.g. test folders, .git, etc.), separated by a comma
- **Ignore files**: you may want to exclude specific files from the scan. This option takes a list of regular expressions to ignore file names, separated by a comma (e.g. `".*foo.*\.js"` will exclude all JS files having "foo" in their name)
- **Ignore paths**: list of regular expressions to ignore paths. Source code within directories matching with this regexp will be automatically excluded from the scan
- **Technologies**: technologies you want to explicitly scan in your sources, separated by a comma, and sorted by preferences